



Massive algal bloom leads to record fish kill

Over 32 tons of dead fish were removed from the Indian River Lagoon and many more sank to the bottom

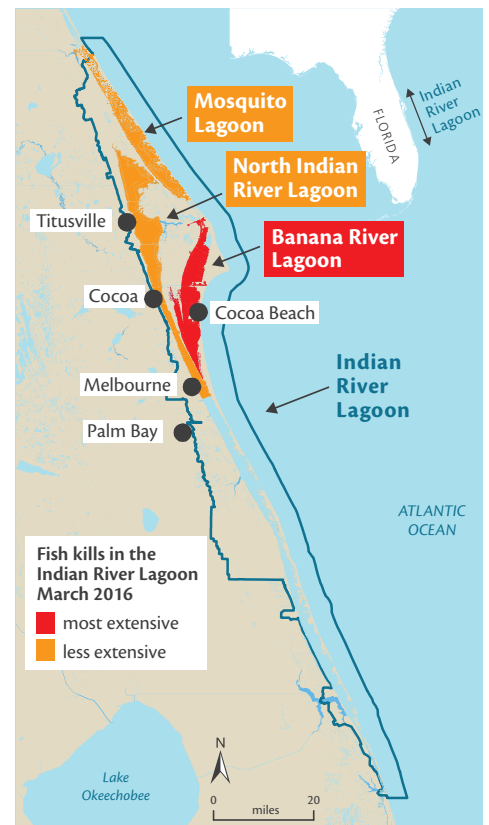
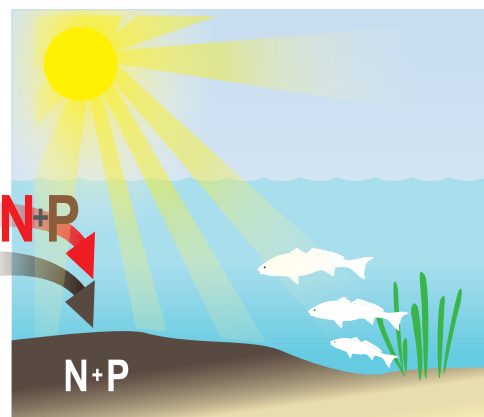
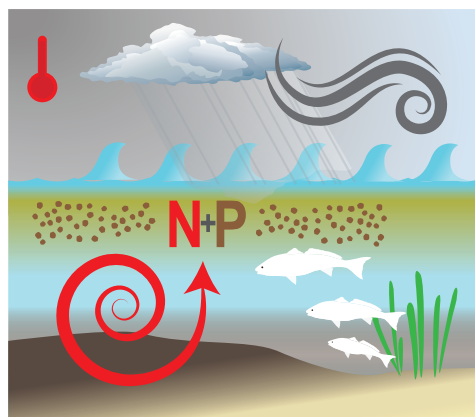


Photo: Maitcolm Denmark/Florida Today

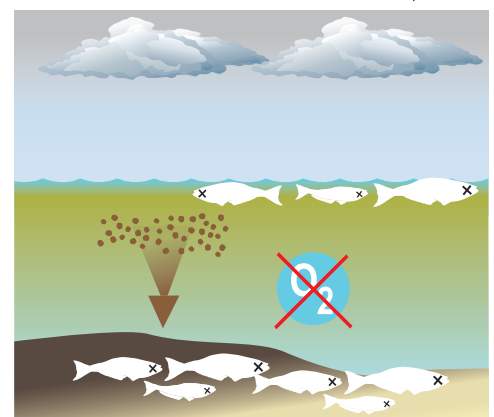
A deadly sequence of events



Excess nutrients are delivered
For years, excess nutrients **N+P** from septic systems and fertilized lawns and crops have flowed to the Lagoon. Also, fine sediments and nutrient-laden materials have created "muck" at the bottom that stores and releases nutrients.



A time bomb explodes
Excess nutrients fuel all algal blooms, but the triggers for specific blooms remains unclear. This brown algal bloom may have been set off by a warm winter combined with nutrients **N+P** delivered by very heavy rainfall and strong winds that stirred up the bottom muck.



Oxygen plummeted as algae died
Cloudy weather slowed algal growth and oxygen production. As algae died and decomposed, oxygen was used up in the water. Less production and more oxygen consumption caused fish and other marine life to suffocate and die.

Working together

Science + Government + Community = Lagoon Health

Many things are being done to address the potential for algal blooms in the Indian River Lagoon.



More scientific research is needed to better understand how and why bloom events occur.



Counties and cities are working with state and federal agencies to remove the muck from the bottom of the Indian River Lagoon and its tributaries. Projects in Turkey Creek, Eau Gallie, and Banana River Lagoon are starting.



Nearly every local municipality has passed a residential fertilizer ordinance that bans the use of fertilizer containing nitrogen (N) in the summer and phosphorus (P) fertilizer without a soil test. Find out about your local fertilizer restrictions at:



Marine Resources Council and partners are producing a *State of the Indian River Lagoon* report. It will track ecosystem health over time, ensuring a focus is maintained and efforts are evaluated to restore it.

www.BeFloridianNow.org

Is there more that can be done? Absolutely!

There are many things that home and business owners can do to help reduce nutrient input into the Indian River Lagoon.



Reduce or eliminate fertilizer use on lawns.



Support local, regional, and state policies that reduce nutrient input and funding initiatives for Lagoon restoration.



Collect and remove yard waste and lawn clippings instead of allowing them to go into storm drains.



Volunteer with a local watershed organization to participate in cleanups, help with shoreline restoration efforts, water sampling, and advocacy.



Use a rain barrel and plant a rain garden. Both capture rainwater for your plants instead of sending it into storm drains as runoff.



Learn more about the Indian River Lagoon problems and solutions at these websites:



Have your septic tank inspected annually and pumped out every other year.

www.SaveTheIRL.org
www.BeFloridianNow.org
www.sjrwmd.com



A volunteer helps collect dead fish and debris in and around the Lagoon.

Photo: Malcolm Denmark/Florida Today



www.mrcirl.org

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